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EXAMINER

JARRETT, SCOTT L

ART UNIT PAPER NUMBER

3623

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,856

Applicant(s)

GOTO ET AL.

Examiner

Scott L. Jarrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/7/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This **Final** Office Action is responsive to Applicant's amendment filed May 23, 2005. Applicant's amendment canceled claims 1-32 and added new claims 33-45. Currently claims 33-45 are pending.

Response to Amendment

2. Applicant's amendment filed on May 23, 2005 with respect to canceled claims 1-32 and new claims 33-45 necessitated new ground(s) of rejection.

Response to Arguments

3. Applicant's arguments with respect to canceled claims 1-32 and new claims 33-45 have been considered but are moot in view of the new ground(s) of rejection.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Title

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Network Based Work Shift Schedule Generation Utilizing a Temporary Work Shift Schedule.

Abstract

6. The abstract of the disclosure is objected to because the abstract does not clearly and/or adequately describe the invention as now claimed. Correction is required. See MPEP § 608.01(b).

Claim Objections

7. Claims 33-36 objected to because of the following informalities: independent claims 33-36 recite the limitation "A work management system having a work management apparatus..." For the purposes of clarity the applicant should amend the claims to either recite a work management system or a work management apparatus but not both. Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 42-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result.

Regarding Claims 42-44, Claims 42-44 only recite an abstract idea. The recited work management method does not apply, involve, use or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. The claimed invention, as a whole, is not within the technological art

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as explained above claims 42-44 are deemed to be directed to non-statutory subject matter.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything in the technological arts as explained above with the exception of the recitation that the method transmits and receives information over a "network." Looking at the claims as a whole, nothing in the body of the claims recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the terms discussed are taken to merely recite a field of use and/or nominal recitation of technology.

Correction required. See MPEP § 2106 [R-2].

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 34 and 38-45 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Brien, U.S. Patent No. 6,587,831.

12. Regarding Claim 34, the work management system as claimed is merely *configured to* generate and send temporary/settled shift table (work shift schedules) and collect/receive response information however the system does not actually generate or send temporary/settled shift tables (work shift schedules) or collect/receive response information. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually generates and sends temporary/settled shift tables (work shift schedules) as well as collects/receives response information.

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "shift table generation unit", etc.) utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section,

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portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 34 O'Brien teaches an Internet-based workforce scheduling system and method wherein the system iteratively (recursively) and dynamically generates, revises (updates) and communicates work shift schedule information to a plurality of users over a network (Column 2, Lines 25-33; Column 6, Lines 44-52; Figure 2, Element 270; Figure 5)

O'Brien teaches that the work shift scheduling system and method comprises:

- generating a temporary (intermediate, unapproved, proposed, etc.) work schedule (shift table, tour schedule, schedule, working hours, work assignments, etc.;

Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168;

Figure 4, Elements 430-450);

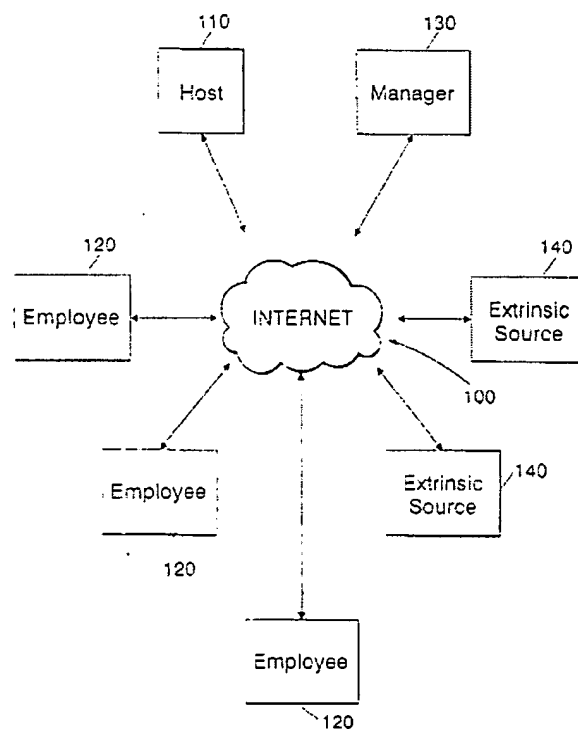
- sending (providing, notifying, displaying, etc.) the work schedule (shift schedule, tour schedule, working hours, etc.) to each of the users (user terminals, computers, etc.; Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580);

- collecting responses (e.g. requests, updates, reviews, bids, etc.) from users in response to the temporary (proposed, intermediate, desired, etc.) work schedule (shift request, swap request, leave request, update availability, etc.; Column 6, Lines 43-52; Column 7, Lines 2-52; Figure 5, Elements 550-590);

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- generating a settled (approved, final, agreed to, current version, updated, etc.) work schedule wherein users are assigned schedules (work shifts, time slots, etc.) based on response information received (Column 5, Lines 1-5; Column 6, Lines 1-17 and 44-52; Column 7, Lines 2-52; Column 8, Lines 38-65; Figure 1, Elements 148, 156, 168; Figures 2-2A; Figure 4, Elements 430-450; Figure 5, Elements 550-590); and

- sending the settled work schedule (shift table) to each of the users (user terminals, computers, etc.; Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

**FIG. 1**

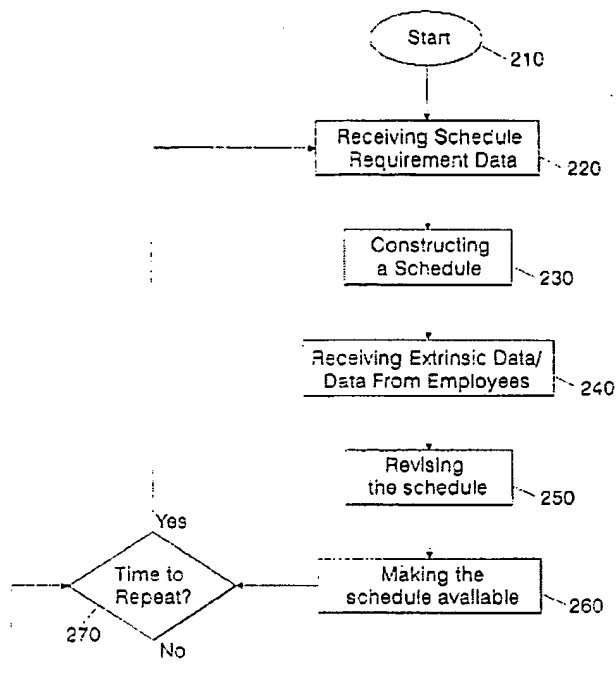


FIG. 2

	Day 1	2	3	4	5	6	7	8	9	10	11	12
Joe	H1	H1	L1	H2	H2	L2	H3	H3	Off	H4	H4	Off
Fred	H1	L1	H2	H2	L2	H3	H3	Off	H4	H4	Off	H1
Mary	L1	H2	H2	L2	H3	H3	Off	H4	H4	Off	H1	H1
Frank	H2	H2	L2	H3	H3	Off	H4	H4	Off	H1	H1	L1
Jim	H2	L2	H3	H3	Off	H4	H4	Off	H1	H1	L1	H2
Arnold	L2	H3	H3	Off	H4	H4	Off	H1	H1	L1	H2	H2
Sue	H3	H3	Off	H4	H4	Off	H1	H1	L1	H2	H2	L2
Andrew	H3	Off	H4	H4	Off	H1	H1	L1	H2	H2	L2	H3
Sam	Off	H4	H4	Off	H1	H1	L1	H2	H2	L2	H3	H3
Ted	H4	H4	Off	H1	H1	L1	H2	H2	L2	H3	H3	Off
Art	H4	Off	H1	H1	L1	H2	H2	L2	H3	H3	Off	H4
Jose	Off	H1	H1	L1	H2	H2	L2	H3	H3	Off	H4	H4

LEGEND

Shift	Start	Finish
H1 Heavy1	6:00 am	10:00 am
H2 Heavy2	10:00 am	2:00 pm
H3 Heavy3	2:00 pm	6:00 pm
H4 Heavy4	6:00 pm	10:00 pm
L1 Light1	6:00 am	2:00 pm
L2 Light2	2:00 pm	10:00 pm
Off No Shift Assignment		

FIG. 2A

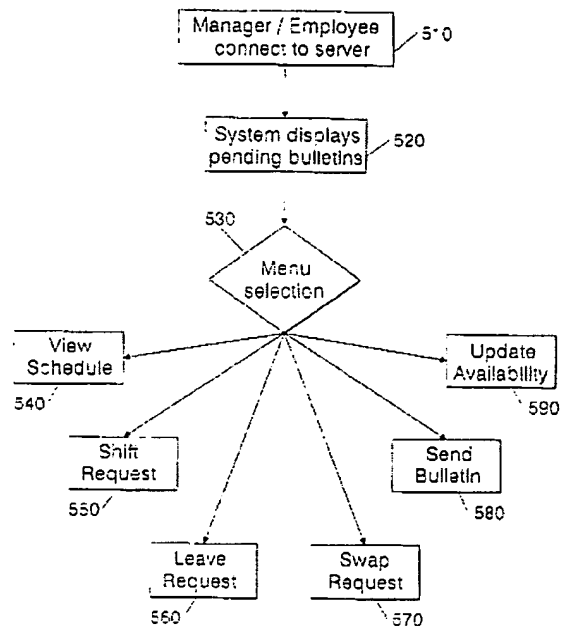


FIG. 5

13. Regarding Claim 38, the work management system as claimed is merely configured to store information, generate and send temporary/settled shift table (work shift schedule) and receiving response information however the system does not actually perform the configured actions/operations as claimed. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually performs the operations/actions as claimed.

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "shift table generation unit", etc.) utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of

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operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 38 O'Brien teaches a workforce scheduling system and method comprising:

- storing employee and management information ("Employee Data", "Business Parameters", "Rules Base"; Column 3, Lines 63-68; Column 4, Lines 1-60; Figure 3, Elements 150, 152, 154 and 156);
- generating a temporary (proposed, intermediate, etc.) work schedule (shift table) based on employee and management information (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450);
- sending the temporary work schedule to users (employees) over a network (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580);
- receiving responses (updates, requests, bids) from users regarding the temporary work schedule (Column 6, Lines 43-52; Column 7, Lines 2-52; Figure 5, Elements 550-590);
- generating (creating, developing, etc.) a settled (final, approved, etc.) work schedule (shift table) based on the employee/user response information received (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450); and
- sending the settled work schedule to users (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

14. Regarding Claim 39 O'Brien teaches a workforce scheduling system and method further comprising:

- generating a temporary work schedule (shift table) that includes recruiting information (i.e. the number of employees/users necessary to fill the shortage/vacancies in the schedule; Column 1, Lines 44-56; Column 4, Lines 3-5; Column 6, Lines 9-13);
- receiving applications (response information, shift requests, shift bids) from users to fill the work schedule vacancies (Column 6, Lines 43-52; Column 7, Lines 2-52; Column 8, Lines 1-24; Figure 5, Elements 550-590); and
- generating a settled (final, approved, etc.) work schedule (shift table) by assigning the employees (users, staff) to fill the vacancies/shortages (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450).

15. Regarding Claim 40, the work management system as claimed is merely configured to generate and send recruiting information and receive response information however the system does not actually perform the configured actions/operations as claimed. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually performs the operations/actions as claimed.

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "cancellation information reception unit", etc.)

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utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding 40 O'Brien teaches a workforce scheduling system and method further comprising:

- receiving a user cancellation request (leave request, shift change request, shift swap request, bulletin board; Column 7, Lines 2-52; Column 8, Lines 1-68; Column 9, Lines 5-16; Figure 5, Elements 550-590);
- generating recruiting information (substitute) to fill the requested cancellation (available/open time slots/shifts; shift request, shift bids; Column 7, Lines 17-68 ; Column 8, Lines 1-37; Figure 6);
- sending the recruiting information to users/employees who can apply for the canceled work schedule (time slot, shift, etc.; Column 7, Lines 17-68 ; Column 8, Lines 1-68; Figure 6);
- receiving user applications (requests, bids, etc.) to fill the vacancies (Column 7, Lines 17-68 ; Column 8, Lines 1-68; Column 9, Lines 5-17; Figure 6);
- updating the settled (final, approved, existing, current, etc.) work schedule (shift table) based on the received applications/requests (Column 7, Lines 17-68 ; Column 8, Lines 1-37; Figure 6); and

- sending the settled (updated) work schedule to users/applicants for the work schedule (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

16. Regarding Claim 41 O'Brien teaches a workforce scheduling system and method further comprising:

- enabling users to enter employee and management information via a display (user interface, screen, page, form, etc.; Column 3, Lines 5-12; Column 4, Lines 25-27; Column 6, Lines 43-52; Figures 2B, 5);

- acquiring (capturing) the entered user information (Column 3, Lines 5-12; Column 4, Lines 25-27; Column 6, Lines 43-52; Figures 2B); and

- storing the employee and management information ("Employee Data", "Business Parameters", "Rules Base"; Column 3, Lines 63-68; Column 4, Lines 1-60; Figure 3, Elements 150, 152, 154 and 156).

17. Regarding Claim 42 O'Brien teaches an Internet-based workforce scheduling system and method further comprising:

- generating a temporary (proposed, unapproved, intermediate, etc.) work shift schedule (shift table) based on employee and management information (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450);

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- sending the temporary work schedule to the plurality of users (employees, resources; Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580);
- receiving response information (requests, updates, availability, shift change requests, etc.) from users (Column 6, Lines 43-52; Column 7, Lines 2-52; Figure 5, Elements 550-590);
- generating a workforce schedule (shift schedule, shift table, etc.) based on the received response information (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 1, Elements 148, 156, 168; Figure 4, Elements 430-450); and
- sending the settled (final, approved, completed, etc.) workforce schedule (shift schedule/table) to the users/employees/resources (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

18. Regarding Claim 43 O'Brien teaches a workforce work shift scheduling system and method further comprising:

- generating a temporary work schedule (shift table) that includes recruiting information (i.e. the number of employees/users necessary to fill the shortage/vacancies in the schedule) when there is a shortage (understaffed) of employees (resources, staff, etc.; Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450);
- receiving applications (response information, shift requests, shift bids, bulletin board) from users to fill the work schedule vacancies (Column 6, Lines 43-52; Column

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7, Lines 2-52; Column 8, Lines 1-24; Column 9, Lines 5-12; Figure 5, Elements 550-590; Figure 6); and

- generating a settled (final, approved, etc.) work schedule (shift table) by assigning the employees (users, staff) to fill the vacancies/shortages (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450).

19. Regarding Claim 44 O'Brien teaches workforce work shift scheduling system and method comprising:

- receiving a user cancellation request (leave request, shift change request, shift swap request, bulletin board; Column 7, Lines 2-52; Column 8, Lines 1-68; Column 9, Lines 5-16; Figure 5, Elements 550-590);

- generating recruiting information (substitute) to fill the requested cancellation; sending the recruiting information to users/employees who can apply for the canceled work schedule (available/open time slots/shifts; shift request, shift bids; Column 7, Lines 17-68 ; Column 8, Lines 1-37; Figure 6);

- receiving user applications to fill the vacancies (shift requests, shift swaps, shift bids, etc. Column 7, Lines 17-68 ; Column 8, Lines 1-68; Column 9, Lines 5-17; Figure 6);

- updating (iterating, revising, etc.) the settled (final, approved, existing, current, etc.) work schedule (shift table) based on the received vacancy applications (Column 7, Lines 17-68 ; Column 8, Lines 1-37; Figure 6); and

- sending the settled (updated) work schedule to users/applicants for the work schedule (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

20. Regarding Claim 45, the work management system as claimed is merely configured to store information, generate and send temporary/settled shift table (work shift schedule) and receive response information however the system does not perform the configured actions/operations as claimed. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually performs the operations/actions as claimed.

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "shift table generation unit", etc.) utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 45 O'Brien teaches a workforce scheduling system and method comprising:

- storing employee and management information ("Employee Data", "Business Parameters", "Rules Base"; Column 3, Lines 63-68; Column 4, Lines 1-60; Figure 3, Elements 150, 152, 154 and 156);

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- generating a temporary (intermediate, unapproved, proposed, etc.) work schedule (shift table, tour schedule, schedule, working hours, work assignments, etc.) based on the employee and management information (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450);

- sending (pushing, providing, distributing, etc.) the work schedule (shift schedule, tour schedule, working hours, etc.) to each of the users (user terminals, computers, etc.; Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580);

- collecting responses (e.g. availability, shift change requests, swaps, etc.) from users in response to the temporary (proposed, intermediate, desired, etc.) work schedule (Column 6, Lines 43-52; Column 7, Lines 2-52; Figure 5, Elements 550-590);

- generating a settled (approved, final, agreed to, etc.) work schedule wherein users are assigned schedules (work shifts, time slots, etc.) based on response information received (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 1, Elements 148, 156, 168; Figure 4, Elements 430-450); and

- sending the settled work schedule (shift table) to each of the users (user terminals, computers, etc.; Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 33 and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien, U.S. Patent No. 6,587,831.

23. Regarding Claim 33, the work management system as claimed is merely configured to store information and generate and send a temporary shift table (work shift schedule) however the system does not actually store information, generate or send a temporary shift table (work shift schedule). For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually stores information and generates and sends a temporary shift table (work shift schedule).

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "shift table generation unit", etc.) utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 33 O'Brien teaches an Internet-based system and method for coordinating, managing and communicating, over a network, the working schedules for a plurality of geographically dispersed employees wherein the system generates work shift tables (schedules; Figure 2A) based on a plurality of information (constraints, parameters, data, etc.) including but not limited to employee, management and resource requirement information (Abstract; Column 1, Lines 44-57).

More specifically O'Brien teaches a workforce scheduling system and method (work management) wherein a plurality of information is transmitted and received between a plurality of users (employees, managers, etc.) over a network comprising:

- storing, in memory (file, database, data set, "data store", etc.), employee information and management information ("Employee Data", "Business Parameters", "Rules Base"; Column 3, Lines 63-68; Column 4, Lines 1-60; Figure 3, Elements 150, 152, 154 and 156);
- designating (determining, forecasting, calculating) the number of employees (staff, resources, etc.; Column 1, Lines 55-57; Figure 3, Element 168; Figure 4, Element 420) necessary for to meet forecasted/future demand/business requirements;
- generating a temporary (intermediate, proposed, unapproved, etc.) work shift schedule (table, spreadsheet) based on the employee, management and number of employee (staff, forecasted resource requirement information, staffing requirements; Column 5, Lines 64-65) information (Column 6, Lines 1-17 and 44-52; Figures 2-2A; Figure 3, Elements 148, 156, 168; Figure 4, Elements 430-450); and

- sending (pushing, providing, notifying, posting, etc.) the work shift schedule (shift schedule, tour schedule, working hours, etc.) to each of the users (user terminals, computers, etc.; Column 6, Lines 17-43; Figure 1; Figure 2, Element 260; Figure 5, Elements 540, 580).

While O'Brien teaches that the workforce scheduling system and method utilizes a plurality of factors including but not limited to the geographic region information (Column 5, Lines 13-17) to generate work shift schedules for geographically dispersed employees O'Brien does not expressly teach that the location of the geographically dispersed employees is represented (expressed) in terms of time zones or more specifically that the system designates the number of employees necessary per time zone as claimed.

Official notice is taken that it is old and well known that time zones are defined as a geographical region that uses the same time and that one can utilize time zones to represent different geographic regions.

It would have been obvious to one skilled in the art at the time of the invention that the workforce scheduling system and method, with its ability to forecast resource requirements for a geographically dispersed workforce as taught by O'Brien would have benefited from representing the geographic location/region of the dispersed workforce (employees, staff) utilizing time zones (i.e. designating the number of employees

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required for each time zone/geographic region) in view of the teachings of official notice; the resultant system providing a convenient mechanism for representing the geographic location/region of a geographically dispersed workforce.

24. Regarding Claim 35, the work management system as claimed is merely *configured to* distribute a settled shift table (work shift schedule), generate and receive recruiting information however the system does not actually distribute a settled shift table (work shift schedule) or generate and receive recruiting information. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually distributes a settled shift table (work shift schedule) and generates and receives recruiting information.

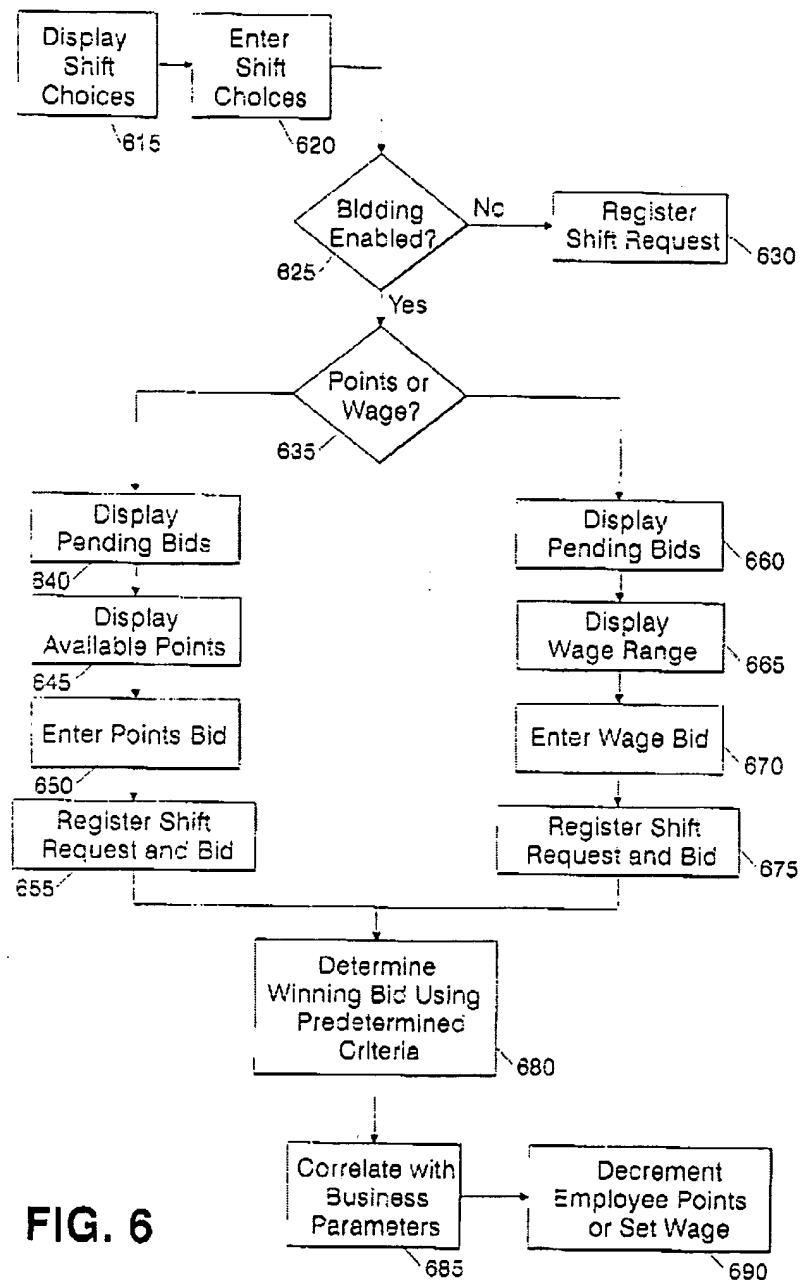
Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "shift table sending unit", etc.) utilized by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or it's subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 35 O'Brien teaches a workforce scheduling system and method comprising:

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- distributing (communicating, providing, pushing, sending, etc.) a settled (final, approved, current, etc.) work schedule (shift table, work table, shift schedule, etc.) to users (Column 6, Lines 17-43; Figure 2, Element 260; Figure 5, Elements 540, 580);
- receiving a work schedule/shift cancellation request from a user (leave request, shift change request, shift swap request, bulletin board; Column 7, Lines 2-52; Column 8, Lines 38-65; Figure 5, Elements 550-590);
- generating (displaying, providing, sending, etc.) recruiting information for recruiting a replacement/substitute employee (e.g. available/open time slots/shifts; shift request, shift bids; Column 7, Lines 17-68 ; Column 8, Lines 1-37; Figure 6);
- sending recruiting information to users/employees who can apply for the canceled schedule (time slot, work shift, etc.; Column 7, Lines 2-68; Column 8, Lines 1-34; Figure 6); and
- receiving work shift applications (bids, shift requests) from users in response to the canceled work shift (leave request, shift change request, shift bids, etc.; Column 7, Lines 53-68; Column 8, Lines 1-34; Column 9, Lines 1-4; Figure 6).

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**FIG. 6**

O'Brien does not expressly teach that the employee recruited to fill the vacant (open, available, understaffed, etc. time slot/shift) is a new employee.

Official notice is taken that recruiting new employees to fill resource shortages (vacancies) is old and very well known. For example it is common for companies to recruit/hire contractors/temporary help to meet resource requirements (i.e. understaffed conditions) such new hires enabling the company to continue to operate at full capacity.

It would have been obvious to one skilled in the art at the time of the invention that the work shift scheduling system and method, with its ability to recruit employees (staff, resources) to fill resource shortages (vacancies), as taught by O'Brien would have benefited from recruiting non-employees (new employees, contractors, temporary workers, etc.) to fill resource shortages, especially when the currently employed workforce is unable to fill the resource shortages, in view of the teachings of official notice; the resultant system enabling companies to utilize existing and new employees to fill work shift vacancies.

25. Regarding Claim 36, the work management system as claimed is merely configured to set a number of employees to be recruited, send recruiting notification, receive application information and send notification information however the system does not actually perform the actions/operations as claimed. For the purposes of examination examiner assumes the applicant will amend the claim to recite that work management system actually performs the actions/operations claimed.

Further the phrases describing the plurality of units (components, code, program, software, routine, subsystem, etc.; e.g. "recruiting information sending unit", etc.) utilized

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by the work management system represent non-functional descriptive material since it is obvious in light of the prior art and to one skilled in the art that where (in what section, portion, subsystem, routine, code, segment, object, etc.) the plurality of operations/actions are performed by the system or its subsystems (components, sections, code, routines, etc.) does not change the overall functionality of the system.

Further regarding Claim 36 O'Brien teaches an Internet-based workforce schedule management system and method further comprising:

- generating (determining, calculating, etc.) the number of employees (staff, resources, workers, employees, etc.) that need to be recruited (found, located, substituted) to fill vacancies in a settled workforce schedule (i.e. the number of resources needed for the work shift schedule is greater than the available/pre-determined number of resources; Column 4, Lines 3-7; Column 5, Lines 64-66; Column 6, Lines 10-15; Figure 2);
- sending recruiting information to users (employee, staff, etc.) who can apply to fill the vacancies (Column 7, Lines 2-68; Column 8, Lines 1-34; Figure 6);
- receiving applications (shift requests, shift bids) from users to fill the vacancies (Column 7, Lines 2-68; Column 8, Lines 1-34; Column 9, Lines 1-4; Figure 6); and
- notifying a person in charge to review and revise the iterative/dynamic schedule (i.e. execute a making routine) if the number of applications received is less than the vacancies that need to be filled (i.e. uncovered/understaffed shifts; Column 5, Lines 1-4; Column 6, Lines 44-51 and 68; Column 7, Lines 1-2; Column 8, Lines 45-47).

While O'Brien teaches that the work shift scheduling system and method recruits employees to fill resource vacancies (i.e. a set of position/number of employees to be recruited) and notifies employees and managers alike for a plurality of reasons/events O'Brien does not expressly teach that there is a recruiting period associated with generating the recruiting information or the execution of an urgent-shift making routine if the number of applications received is less than the vacancies as claimed.

Official notice is taken that recruiting to fill vacancies in shift schedules implicitly has a time period during which the recruiting information must be sent and acted upon; specifically recruiting an employee (new, temporary, or other) to fill a vacant spot must happen prior to the actual time slot/shift since once the work shift time period has been past it is impossible to fill it.

It would have been obvious to one skilled in the art at the time of the invention that the work shift scheduling system and method, with its ability to recruit employees (resources) to fill vacant work shifts, as taught by O'Brien would have benefited from recognizing the implicit recruiting time period associated with fill vacancies for work shifts in view of the teachings of official notice; the resultant system ensuring that vacant positions can be filled before the vacant work shift scheduled time is passed.

Official notice is taken that managers responsible for work shift scheduling monitor (review) work shift schedules to ensure that the schedule meets business requirements (e.g. enough workers are scheduled to meet anticipated demand) and that upon determining that a particular business requirement is not met these managers would revise/update/rework the schedule in order to meet the desired business requirement. One good example of this event driven (urgent) shift making routine would be determining that not enough resources are available (have applied for) the vacant time slots/shifts wherein the manager attempt to rework/re-plan the work shift schedule in order to meet the required staffing level.

It would have been obvious to one skilled in the art at the time of the invention that the work shift scheduling system and method, with its ability to recruit employees (resources) to fill vacant work shifts and notify managers and other users on the occurrence of particular events, as taught by O'Brien would have benefited from determining (realizing) when the number of applications is not enough to fill the work shift vacancies in view of the teachings of official notice; the resultant system ensuring that vacant work shifts can be filled as soon as possible and ensure the business is able to operate at the required/desired capacity.

26. Regarding Claim 37 O'Brien teaches a workforce scheduling system and method wherein the system:

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- selects (assigns, accepts, schedules, etc.) as many employees (staff, resources, etc.) necessary to fill the work schedule vacancies (i.e. iteratively assigns/schedules employees for work shifts; Column 1, Lines 44-56; Column 2, Lines 25-33; Figures 2-3);

- notifies (sends, transmits, provides, etc.) work schedule information to users who are accepted/selected to fill the work schedule vacancies (Column 7, Lines 48-52; Figure 1, Element 158); and

- notifies (sends, transmits, provides, etc.) work schedule information to users who are not accepted/selected to fill the work schedule vacancies (Column 7, Lines 48-52; Figure 1, Element 158).

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Andre et al., U.S. Patent No. 6,278,978, teach a workforce (agent) work shift scheduling system and method wherein a post-processing step is performed to optimize/revise/update a temporary schedule until an optimal/settled scheduled is determined. Andre et al. further teach a plurality of well-known workforce scheduling system and methods.

- Jarrah, Ahmad et al., Solving Large-scale Tour Scheduling Problems teach a method and system for generating workforce work shift schedules (shift tables) based

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on a plurality of employee and management information. Jarrah et al. further teach a plurality of well-known research into tour, shift and personnel scheduling.

- Holzberg, Carol, Visual Staff Scheduler Pro 3.0, teaches the commercial availability of a workforce work shift (shift table/calendar) scheduling system and method.

- Sprout, Alison, Scheduling your forces with a PC, teaches the commercial availability and commercial utilization of a workforce work shift scheduling system and method (Adaptive Software's People Scheduler) and that the system enables managers to update the schedule if someone cancels (e.g. calls in sick).

- Scheduling software boots efficiency, saves time and money, teaches the commercial availability of a workforce work shift scheduling system and method (ScheduleSoft) wherein the system generates shift tables/schedules based on management and employee information as well as provides an "easy" mechanism for updating/revising the schedule as necessary.

- Adaptiv WorkFORCE97 web pages, teaches the commercial availability of a workforce work shift scheduling system and method wherein the system forecasts resource requirements and generates work shift schedules based on a plurality of management and employee information via a graphical user interface.

- Blue-Pumpkin Software web pages, teaches the commercial availability of a workforce work shift scheduling system and method (PrimeTime) wherein the system generates work shift schedules based on forecasted staffing requirements, employee and management preferences/information.

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- Mizzisoft web pages, teaches the commercial availability of a workforce work shift scheduling system and method (rostering, shift generating) wherein the system generates a work shift schedule (roster).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ
8/4/2005




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